

voice input portion for outputting a [vocal sample] user's digitally converted [from voice made] vocal sample, a preprocessor for extracting a characteristic vector suitable for phoneme division[, ] from the vocal sample input [from] at the voice input portion, a multi-layer perceptron (MLP) phoneme dividing portion for finding and outputting the phoneme border [of phoneme,] using the characteristic vector of the preprocessor, and a phoneme border outputting portion for outputting position information [on] regarding the phoneme border [of phoneme] of the MLP phoneme dividing portion in the form of frame position, said method comprising the steps of:

02 (a) sequentially segmenting and framing a voice with digitalized voice samples, extracting characteristic vectors by vocal frames, and extracting an inter-frame characteristic vector of the difference between nearby frames of the characteristic [vectors] vector by frames, to thereby normalize the maximum and minimum of said [characteristics] inter-frame characteristic vectors;

(b) initializing weights present between an input layer and a hidden layer and between the hidden layer and an output layer of said MLP, designating an output target data of said MLP, inputting said inter-frame characteristic vectors extracted from a currently analyzed frame to said MLP for learning, and storing and finishing information on the weight obtained through learning and the standard of said MLP if the reduction rate of a mean squared error converges within a permissible limit; and

(c) reading the weight obtained in said step (b), receiving said inter-frame characteristic vectors from the

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currently analyzed frame, performing an operation of phoneme border discrimination to generate [an] output [value] values, discriminating the phoneme border according to the output [value] values, and if the current analyzed frame arrives two frames preceding the final frame of [incoming voice] the end portion of the vocal samples, outputting a frame number indicative of the border of phoneme as a final result.

2. (Amended) The method as claimed in claim 1, wherein the voice framing of said step (a) is performed by taking a Hamming window in a length of 16 msec every 10 msec, with respect to the overall [incoming] length of the end portion of the vocal samples.

Please cancel Claim 3 without prejudice or disclaimer.

Please insert the following new Claim 4.

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~~--4. The method as claimed in claim 1, wherein the phoneme border discrimination of said step (c) is performed such that the difference of the output values OUT (0) and OUT (1) are compared to the threshold value determined from previous experimental statistics, and it is determined that if the difference larger than the threshold value and OUT (0) is larger than OUT (1), then the analyzed frame is the phoneme border, and if the difference is larger than the threshold value and OUT (1) is larger than OUT (0), the analyzed frame is not the phoneme border.--~~